

## **201 KAR 20:490. Licensed practical nurse intravenous therapy scope of practice.**

RELATES TO: KRS 314.011(10)(a), (c)

STATUTORY AUTHORITY: KRS 314.011(10)(c), 314.131(1), 314.011(10)(c)

NECESSITY, FUNCTION, AND CONFORMITY: KRS 314.131(1) authorizes the Board of Nursing to promulgate administrative regulations as may be necessary to enable it to carry into effect the provisions of KRS Chapter 314. KRS 314.011(10)(c) authorizes the board to promulgate an administrative regulation to establish the scope of practice for administering medicine or treatment by a licensed practical nurse. KRS 314.011(10)(a) requires that licensed practical nurses practice under the direction of a registered nurse, physician, or dentist. This administrative regulation establishes the scope of that practice as it relates to intravenous therapy.

Section 1. Definitions. (1) "Administration" means to initiate and infuse intravenous therapy.

(2) "Antineoplastic agent" means a medication that prevents the development, growth, or proliferation of malignant cells.

(3) "Bolus" means a concentrated medication or solution given rapidly over a short period of time.

(4) "Central venous access device" means a device that permits access to the central vascular system and is inserted with the tip residing in the lower one-third of the superior vena cava or above the level of the diaphragm in the inferior vena cava.

(5) "Direction" means a communication of a plan of care that is based upon assessment of a patient by an advanced practice registered nurse, a registered nurse, physician, or dentist that establishes the parameters for the provision of care or for the performance of a procedure.

(6) "Discontinuance" means to stop the infusion of the medication or fluid and does not include removal of the intravenous access device.

(7) "Fibrinolytic agent" means a pharmaceutical agent capable of dissolving blood clots.

(8) "Intravenous access device" means either a peripheral access device or a central venous access device.

(9) "Mix" or "mixing" means to combine two (2) or more medications or solutions, and includes reconstituting a powder into a liquid, and diluting a medication or solution.

(10) "Moderate sedation" means the administration of intravenous medications to produce a state that intentionally results in a depressed level of consciousness in a patient.

(11) "Peripheral access device" means a peripherally-inserted intravenous catheter or needle that is less than or equal to three (3) inches in length.

(12) "Pharmacology" means information on the classification of intravenous drugs, indications for use, pharmacological properties, monitoring parameters, contraindications, dosing, clinical mathematics, anticipated side effects, potential complications, antidotal therapy, compatibilities, stabilities, specific considerations for select intravenous drugs, and administration of intravenous medications to pediatric, adult, and geriatric populations.

(13) "Procedural sedation" means the administration of intravenous medications to produce a state that allows a patient to tolerate unpleasant procedures and results in a depressed level of consciousness.

(14) "Push" means administration of medication under pressure via a syringe.

(15) "Supervision" means the provision of guidance by a registered nurse, advanced practice registered nurse, physician or dentist for the accomplishment of a nursing task with periodic observation and evaluation of the performance of the task including validation that the nursing task has been performed in a safe manner.

(16) "Supervisor" means the registered nurse, advanced practice registered nurse, physician or dentist who provides supervision of the licensed practical nurse's practice as defined in

subsection (15) of this section.

(17) "Therapeutic phlebotomy" means a clinical procedure whereby blood volume is reduced to achieve a therapeutic outcome.

(18) "Titration" means adjustment of a medication dosage or rate of solution infusion as prescribed within a therapeutic range that is based on the assessment of a patient.

(19) "Vesicant" means an agent capable of causing injury if it escapes from the intended vascular pathway into surrounding tissue.

Section 2. Education and Training Standards. (1) Prior to performing intravenous (IV) therapy, the licensed practical nurse (LPN) shall have completed education and training related to the scope of IV therapy for an LPN. This education and training shall be obtained through:

(a) A prelicensure program of nursing for individuals admitted to the program after September 15, 2004; or

(b) An institution, practice setting, or continuing education provider that has in place a written instructional program and a competency validation mechanism that includes a process for evaluation and documentation of an LPN's demonstration of the knowledge, skills, and abilities related to the safe administration of IV therapy. The LPN shall receive and maintain written documentation of completion of the instructional program and competency validation.

(2) The education and training programs recognized in subsection (1) of this section shall be based on "Policies and Procedures for Infusion Nursing" and "Infusion Nursing: Standards of Practice" and shall include the following components:

(a) Technology and clinical applications;

(b) Fluid and electrolyte balance;

(c) Pharmacology and vesicants;

(d) Infection control;

(e) Transfusion therapy;

(f) Parenteral nutrition; and

(g) Legal aspects based on KRS Chapter 314 and this administrative regulation.

Section 3. Supervision Requirements. (1) An LPN performing IV therapy procedures shall be under the direction and supervision of a registered nurse (RN), advanced practice registered nurse (APRN), physician, or dentist.

(2) For a patient whose condition is determined by the LPN's supervisor to be stable and predictable, and rapid change is not anticipated, the supervisor may provide supervision of the LPN's provision of IV therapy without being physically present in the immediate vicinity of the LPN, but shall be readily available.

(3) In the following cases, for the LPN to provide IV therapy, the LPN's supervisor shall be physically present in the immediate vicinity of the LPN and immediately available to intervene in the care of the patient:

(a) If a patient's condition is or becomes critical, fluctuating, unstable, or unpredictable;

(b) If IV medications or fluids are administered by push or bolus administration, except for saline or heparinized saline to maintain patency of an IV access device;

(c) If a patient has developed signs and symptoms of an IV catheter-related infection, venous thrombosis, or central line catheter occlusion;

(d) If a patient is receiving blood, blood components, or plasma volume expanders; or

(e) If a patient is receiving peritoneal dialysis or hemodialysis.

Section 4. Standards of Practice. (1) An LPN shall perform only those IV therapy acts for which the LPN possesses the knowledge, skill, and ability to perform in a safe manner, except

as limited by Section 6 of this administrative regulation and under supervision as required by Section 3 of this administrative regulation.

(2) An LPN shall consult with an RN or physician, physician assistant, dentist, or advanced practice registered nurse and seek guidance as needed if:

- (a) The patient's care needs exceed the licensed practical nursing scope of practice;
- (b) The patient's care needs surpass the LPN's knowledge, skill, or ability; or
- (c) The patient's condition becomes unstable or imminent assistance is needed.

(3) An LPN shall obtain instruction and supervision as necessary if implementing new or unfamiliar nursing practices or procedures.

(4) An LPN shall follow the written, established policies and procedures of the facility that are consistent with KRS Chapter 314.

Section 5. Functions That May Be Performed. An LPN who has met the education and training requirements of Section 2 of this administrative regulation may perform the following IV therapy functions, except as limited by Section 6 of this administrative regulation and under supervision as required by Section 3 of this administrative regulation:

(1) Calculation and adjustment of the flow rate on all IV infusions;

(2) Observation and reporting of subjective and objective signs of adverse reactions to any IV administration and initiate appropriate interventions;

(3) For all IV access devices:

(a) Administration of IV fluids and medications via central venous and peripheral access devices as permitted by this section and not prohibited by Section 6 of this administrative regulation;

(b) Performance of site care and maintenance that includes:

- 1. Monitor access site and infusion equipment;
- 2. Change administration set, including add-on device and tubing;
- 3. Flushing; and
- 4. Change site dressing;

(c) Discontinuance of a medication or fluid infusion; and

(d) Conversion of a continuous infusion to an intermittent infusion;

(4) Insertion or removal of a peripheral access device;

(5) Administration, monitoring, and discontinuance of blood, blood components, and plasma volume expanders;

(6) Administration of IV medications and fluids that are mixed and labeled by an RN, APRN, physician, dentist, or pharmacist or are commercially prepared;

(7) Mixing and administration via push or bolus route of any of the following classifications of medications:

(a) Analgesics;

(b) Antiemetics;

(c) The antagonistic agents for analgesics;

(d) Diuretics;

(e) Corticosteroids; and

(f) Saline, heparinized saline, or Heplock solution to maintain patency of an IV access device;

(8) Administration of glucose to patients fourteen (14) years of age or older via direct push or bolus route;

(9) Administration, monitoring, and discontinuance of IV medications and fluids given via a patient controlled administration system;

(10) Administration, monitoring, and discontinuance of parenteral nutrition and fat emulsion

solutions;

(11) Performance of dialysis treatment, including:

(a) Administering Heparin 1:1000 units or less concentration either to prime the pump, initiate treatment, or for administration throughout the treatment, in an amount prescribed by a physician, physician's assistant, or advanced practice registered nurse. The licensed practical nurse shall not administer Heparin in concentrations greater than 1:1000; and

(b) Administering normal saline via the dialysis machine to correct dialysis-induced hypotension based on the facility's medical protocol. Amounts beyond that established in the facility's medical protocol shall not be administered without direction from a registered nurse or a physician;

(12) Collection of blood specimens from a peripheral IV access device only at the time of initial insertion;

(13) Removal of a noncoring needle from an implanted venous port;

(14) Titration of intravenous analgesic medications for hospice patients;

(15) Administration of peripheral intravenous medications via a volumetric control device;

(16) Administration of intravenous medications or solutions via a ready-to-mix intravenous solution infusion system;

(17) Aspiration of a central venous catheter to confirm patency via positive blood return; and

(18) Administration of medications or fluids via:

(a) Peripherally inserted central catheters; or

(b) Implanted or tunneled central venous catheters.

Section 6. Functions that Shall Not be Performed. An LPN shall not perform the following IV therapy functions:

(1) Administration of tissue plasminogen activators, immunoglobulins, antineoplastic agents, or investigational drugs;

(2) Accessing of a central venous access device used for hemodynamic monitoring;

(3) Administration of medications or fluids via arterial lines or implanted arterial ports;

(4) Administration of medications via push or bolus route except as permitted by Section 5(7) or (8) of this administrative regulation;

(5) Administration of a fibrinolytic agent to declot any IV access device;

(6) Administration of medications requiring titration, except as permitted by Section 5(14) of this administrative regulation;

(7) Insertion or removal of any IV access device, except as permitted by Section 5(4) or (13) of this administrative regulation;

(8) Accessing or programming an implanted IV infusion pump;

(9) Administration of IV medications for the purpose of procedural sedation, moderate sedation, or anesthesia;

(10) Administration of fluids or medications via an epidural, intrathecal, intraosseous, or umbilical route, or via a ventricular reservoir;

(11) Administration of medications or fluids via an arteriovenous fistula or graft, except for dialysis;

(12) Performance of the repair of a central venous access device;

(13) Mixing of any medications other than those listed in Section 5(7) of this administrative regulation;

(14) Insertion of noncoring needles into an implanted port;

(15) Performance of therapeutic phlebotomy;

(16) Administration of medications or fluids via a nontunneled, nonimplanted central venous catheter;

- (17) Aspiration of an arterial line;
- (18) Withdrawal of blood specimens via a central venous catheter; or
- (19) Initiation and removal of a peripherally inserted central, midclavicular, or midline catheter.

Section 7. Incorporation by Reference. (1) The following material is incorporated by reference:

- (a) "Policies and Procedures for Infusion Nursing", Fourth Edition, 2011; and
- (b) "Infusion Nursing: Standards of Practice", 2011.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Board of Nursing, 312 Whittington Parkway, Suite 300, Louisville, Kentucky, Monday through Friday, 8 a.m. to 4:30 p.m. (30 Ky.R. 2585; Am. 31 Ky.R. 369; 546; eff. 9-15-2004; 32 Ky.R. 2324; 33 Ky.R. 382; eff. 9-1-2006; 36 Ky.R. 2073-A; 2312; eff. 6-15-2010; TAm eff. 7-15-2010; 37 Ky.R. 2446; 2830; eff. 6-15-2011; 38 Ky.R. 1764; 1945; eff. 6-20-2012.)